REMARKS

By the above amendment, each of independent claims 5, 6 and 16 have been amended to clarify the features of the defect candidate image display method of the present invention that a substrate surface having a pattern or a pattern is inspected to obtain an actual image of a defect candidate of the substrate surface or pattern as well as data including the location of the defect candidate of the substrate surface or pattern, with the actual image of the detected defect candidate of the substrate surface or pattern being stored, such as in a memory. In accordance with the present invention, as now recited in the independent claims, the defect candidate data is displayed on a screen in a map format on the screen together with a stored actual image of a designated one of the defect candidates of the substrate surface or the pattern without revisiting the substrate surface or pattern and the designated defect candidate of the substrate surface or the pattern to produce an actual image of the designated defect candidate of the substrate surface or pattern, so as to clarify differences between the present invention and the cited art, as will be discussed below.

As to the rejection of claims 3, 5, 6, 12 - 16 and 25 - 37 under 35 USC 103(a) as being unpatentable over Mizuno (US Patent No. 6,047,083) in view of Worster et al (US Patent No. 5,963,314); and the rejection of claims 10, 11 and 20 - 24 under 35 USC 103(a) as being unpatentable over Mizuno and Worster et al further in view of Gallarda et al (US Patent No. 6,539,106), such rejections are traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

As noted in the office action, in applying Mizuno to the claimed invention, applicants have argued that "Mizuno does not teach to display a selected one of the stored actual images of the extracted defect candidates which is designated on the screen among the extracted defect candidate data displayed in said map format on said screen so that the selected one of the stored actual images is displayed together with said map format on said screen" (emphasis added) and apparently, the Examiner has accepted the fact that Mizuno does not disclose or teach such feature. Thus, the Examiner contends that "Such a teaching is found in Worster et al at line 29 in column 13 through line 44 in column 14 and illustrated in FIG. 4 ... so that an operator can select a stored image of a defect to display by using, for example, a mouse to "point" and "click" on a defect indicated in the wafer map." (emphasis added). Applicants submit that the Examiner has mischaracterized the disclosure of Worster et al and that the contention of the Examiner that "it would have been obvious to a person having ordinary skill in the art to display a selected one of the stored actual images of the extracted defect candidates which is designated on the screen among the extracted defect candidate data displayed in said map format on said screen so that the selected one of the stored actual images is displayed together with said map format on said screen in the manner taught by Worster et al in order to make use of the point and click system control method disclosed by Worster et al or to aid an operator in relating the image of a defect to its actual location on the wafer" (emphasis added) is again a mischaracterization of the disclosure of Worster et al, as will be discussed below.

Irrespective of the Examiner's contention, applicants submit that Worster et al does not disclose or teach the recited feature of each of independent claims 5, 6 and 16 of "storing said outputted actual image of ... defect candidate" of the substrate surface or the pattern, and simultaneously displaying with the defect candidate data of location information displayed in a map format on the screen a "selected one of the stored actual images of the detected defect candidates" of the substrate surface or the pattern, as previously presented. Moreover, by the present amendment, in accordance with the present invention, since the stored actual image of the defect candidate is displayed based upon the stored actual image, the display is effected without revisiting the substrate surface or the pattern and the designated defect candidate of the substrate surface or the pattern to produce an actual image of the designated defect of the substrate surface or the pattern, as now recited in the independent claims in order to clarify the differences with respect to Worster et al.

Contrary to the position set forth by the Examiner, Worster et al provides no disclosure or teaching of storing actual images of defects of a wafer and displaying a stored actual image together with defects shown in a map format on a screen. In accordance with Worster et al, a laser imaging system 100 is utilized for imaging the wafer, and as indicated in column 14, lines 4 - 6, "The Laser Window directly displays the live laser image produced by the scanning laser beam." (emphasis added). Further, as recognized by the Examiner, and as described in column 14, lines 36 - 39, "The Wafer Map Window displays the defect map of the wafer under inspection, the defect

map having produced by a wafer scanner that is not part of laser imaging system 100 ... The operator can select a defect to revisit by, for instance, using a mouse to "point and click" on the defect. (emphasis added). Applicants submit that when a defect is selected in this manner, in accordance with the disclosure and teaching of Worster, that selected portion of the wafer is newly scanned by the laser beam so as to directly display the live laser image produced by the scanning laser beam with appropriate control of the focus and range of the laser. Applicants submit that there is no disclosure or teaching in Worster et al of storing an actual image of the defect and displaying the stored actual image together with the map format of the defects, as recited in the independent claims of this application. Thus, applicants submit the Examiner has misinterpreted the meaning of "revisit" as representing obtaining a stored actual image, and it is apparent that the revisiting requires a revisiting of the wafer and the defect thereof so as to then produce an actual image of the defect. The claims have been amended to clarify that no revisiting of the substrate surface or pattern and the designated defect is obtained with the present invention, and applicants submit that such features are not disclosed by Worster et al and in light of the recognition by the Examiner that Mizuno does not disclose such features, the proposed combination also fails to provide the recited features of the independent and dependent claims of this application and all claims should be considered allowable thereover.

Applicants submit that with respect to the addition of Gallarda et al to the combination of Mizuno and Worster et al, Gallarda et al does not

overcome the deficiencies of the proposed combination of Mizuno and Worster et al, as pointed out above, such that all claims also patentably distinguish over this proposed combination of references.

Additionally, applicants note that the dependent claims recite further features which are not disclosed or taught by the cited art, irrespective of the Examiner's contention, and all claims should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 501.41125X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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